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FOREST SURVEY RELEASE NO. 15 A SEPTEMBER 1938 PROGRESS REPORT

FOREST STATISTICS

IDAHO COUNTY, IDAHO
(IN THE NORTHERN ROCKY MOUNTAIN REGION)

FROM THE INVENTORY PHASE OF THE FOREST SURVEY

U. S. DEPARTMENT OF AGRICULTURE FOREST SERVICE

NORTHERN ROCKY MOUNTAIN
FOREST AND RANGE EXPERIMENT STATION

MISSOULA MONTANA

BY FOREST SURVEY STAFF M. BRADNER REGIONAL DIRECTOR

FOREST STATISTICS FOR IDAHO COUNTY, IDAHO
In the Northern Rocky Mountain Region

From the Inventory Phase
of the Forest Survey

COVER PICTURE

The Shissler mill, one of the very early sawmills in this part of north Idaho, built near Mount Idaho in 1874 and later moved to Craig Mountain in 1881. Picture taken at Craig Mountain.

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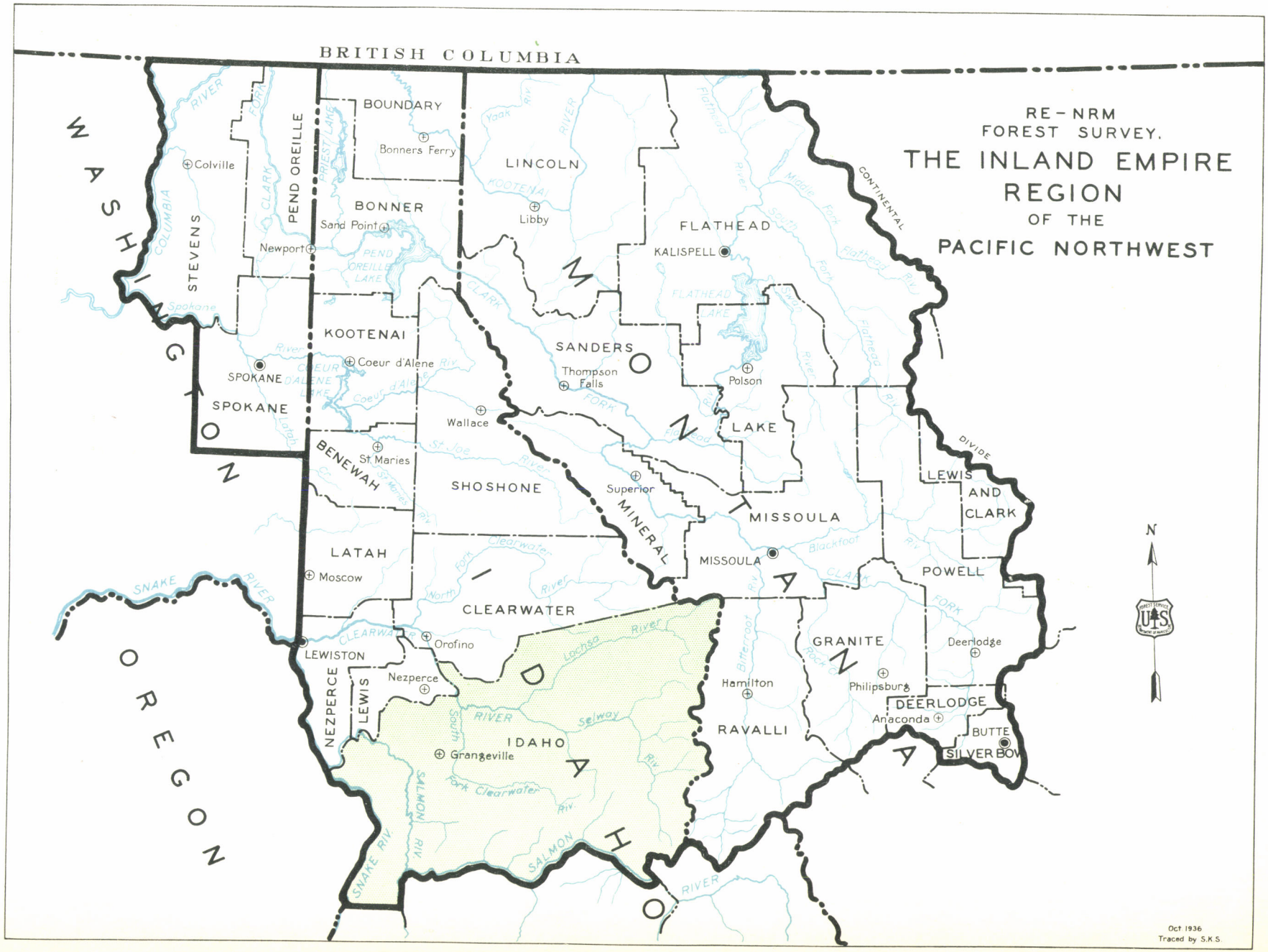
BRITISH COLUMBIA
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FOREST SURVEY.
THE INLAND EMPIRE
REGION
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PACIFIC NORTHWEST
WASHINGTON
OREGON
IDAHO
MONTANA
BOUNDARY
Bonners Ferry
PEND OREILLE
Colville
STEVENS
BONNER
Sand Point
Newport
LINCOLN
Libby
FLATHEAD
KALISPELL
CONTINENTAL DIVIDE
KOOTENAI
Coeur d'Alene
SPOKANE
SPOKANE
SANDERS
Thompson Falls
Polson
LAKE
Wallace
BENEWAH
St Maries
SHOSHONE
Superior
MINERAL
MISSOULA
MISSOULA
LEWIS AND CLARK
POWELL
LATAH
Moscow
CLEARWATER
Orofino
LEWISTON
NEZPERCE
Nezperce
LEWIS
IDAHO
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RAVALLI
Hamilton
GRANITE
Philipsburg
Deerlodge
DEERLODGE
Anaconda
BUTTE
SILVER BOW
Oct 1936
Traced by S.K.S.

RE-NRM
FOREST SURVEY

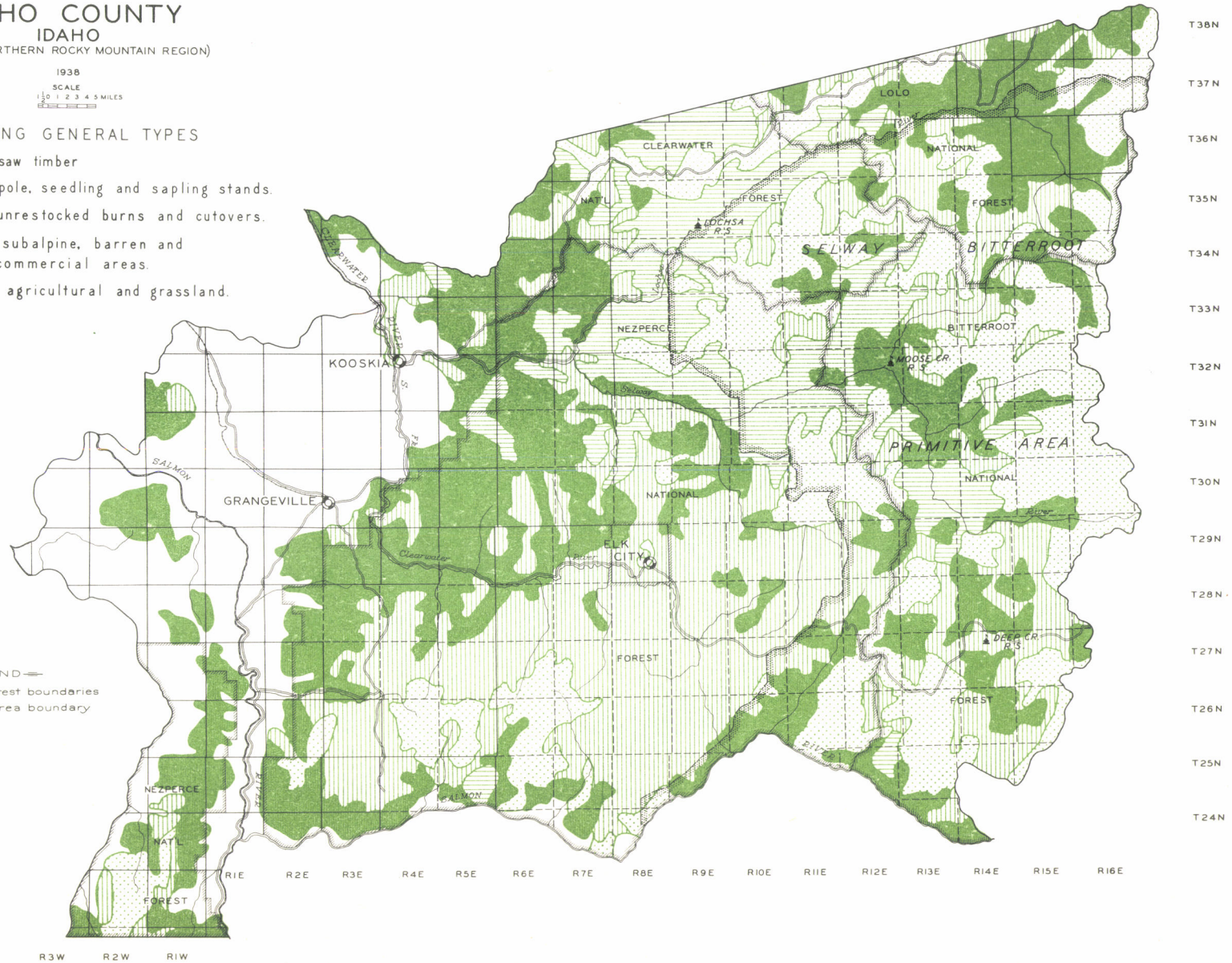
IDAHO COUNTY
IDAHO
(IN THE NORTHERN ROCKY MOUNTAIN REGION)

1938

SCALE
1/2 0 1 2 3 4 5 MILES

SHOWING GENERAL TYPES

- Principally saw timber
- Principally pole, seedling and sapling stands.
- Principally unrestocked burns and cutovers.
- Principally subalpine, barren and rocky noncommercial areas.
- Principally agricultural and grassland.



LEGEND
- National forest boundaries
- Primitive area boundary

E. WHITE 7/31/37

RE-NRM
Forest Survey

FOREST STATISTICS FOR IDAHO COUNTY,[1/] IDAHO
In the Northern Rocky Mountain Region

Foreword

Idaho County, with an area almost equaling that of the State of New Jersey, is the largest of the ten counties in the geographical unit known as the Idaho Panhandle or northern Idaho. It is the largest, also, from the standpoint of its forest acreage, containing 3.7 million acres or more than one-third of the forest area in northern Idaho. Despite this fact, the timber exploitation in Idaho County has been light and the lumber industry comparatively unimportant as a factor in the local economic development. Sixty-one percent of the forest area in this county has little or no commercial worth for the production of timber products and the greater part of the commercially valuable timberland is as yet economically too remote to be profitably logged. Recreation, wild life, water retardation and erosion control today rank as the principal forest values in this extensive area.

1/ This is the thirteenth in a series of county reports by the Forest Survey, presenting essential forest statistics for northeastern Washington, northern Idaho, and Montana, collectively known as the Northern Rocky Mountain Region. The portion of Idaho County lying south of the Salmon River and east of the Little Salmon River is not in this Region and therefore not covered by these forest statistics. Except for general census figures the term Idaho County, as used in this report, refers only to the portion in northern Idaho (see maps).

Industrial Development of Idaho County

Rugged topography has been one of the important factors retarding extensive exploitation of the Idaho County timber. The level prairie land lying northwest of Grangeville rapidly changes to a rough and mountainous country in which a great number of the peaks rising from the Clearwater, Salmon, and Snake Rivers are over 7,000 feet in elevation. The contrast is particularly striking along the mile deep canyons of the Salmon and Snake Rivers. As a result of this, forest industry has been greatly overshadowed in the past by agriculture and mining.

Most of the farm land in Idaho County is concentrated in the fertile Camas Prairie northwest of Grangeville, and it is estimated that approximately 70 percent of the people in the county reside in this locality. However, the first extensive settlement was not on the prairies but in the mountainous area, in response to the gold discoveries in the sixties which were followed by two gold rushes several decades apart, the country being literally combed for its wealth by thousands of prospectors.

Mining. - Gold was found near the present sites of Elk City and Florence in 1861, the year following the first important discoveries of this metal in the present State of Idaho. Attracted by its irresistible lure, thousands flocked to this vicinity within the next year and Elk City, Florence,

and other towns mushroomed in the more lucrative placer districts. The boom waned within the next few years, and the white miners were followed by Chinese. In 1880 there were 738 Orientals in Idaho County, according to the census, the number falling off by 1890 a few years ahead of the second great gold rush when new opportunities were afforded by lode and hydraulic possibilities. Thousands once again flocked to these hills in the late nineties and early nineteen hundreds. As before, the fever heat soon cooled, and mining activity since 1903 has been more or less desultory. In the 1930 census only 267 persons were listed as gainfully employed in the extraction of minerals in Idaho County. The value of the gold extracted in 1933 is reported at 713 thousand dollars. Because Idaho County also extends south of the Salmon River, these figures are probably high for the area considered in this report.

Agriculture. - The glamour surrounding these gold rushes has accentuated mining development in the industrial picture of this county. Nevertheless, as far as actual values are concerned, agriculture has been the principal industry. The first cattlemen settled on the prairie in the sixties, later being followed by the grain farmers. It is said that the first white home was constructed on the prairie in 1861. The farm expansion since then can be traced in the following census statistics:

GENERAL CLASSIFICATION OF LAND
IDAHO COUNTY[1], IDAHO

Figure 1.

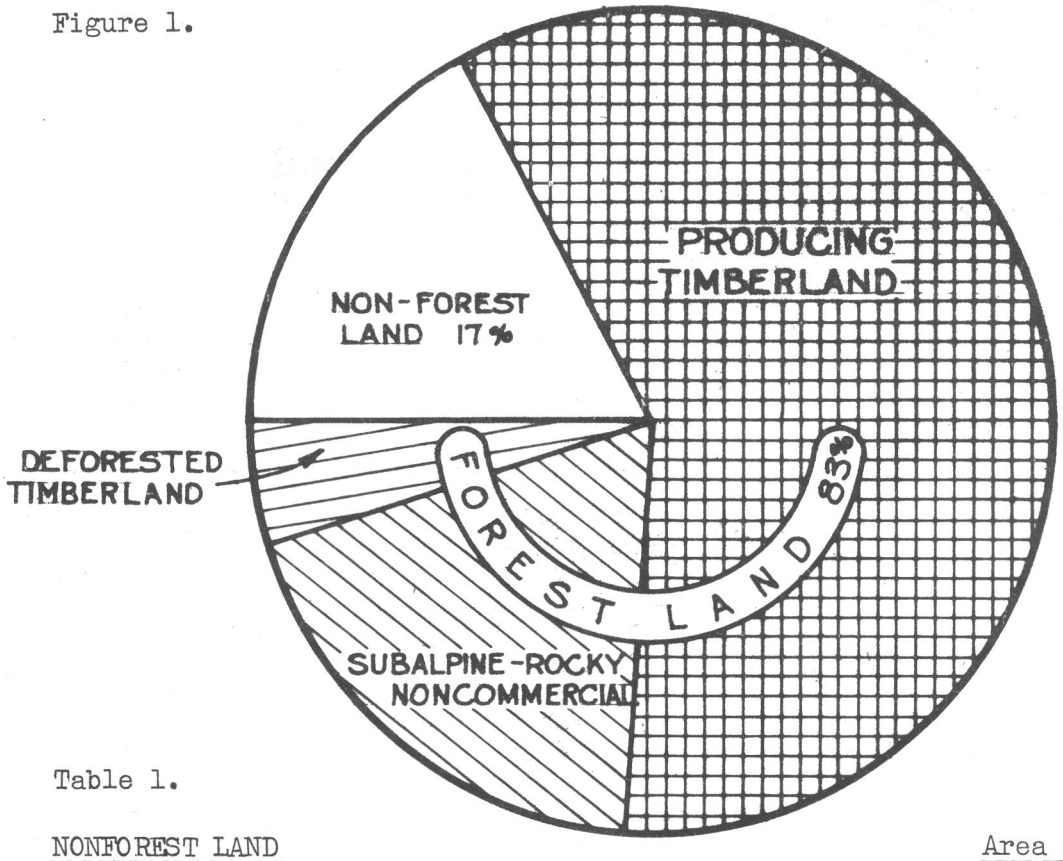


Table 1.

	Area in Acres
NONFOREST LAND	
Townsites	1,803
Cultivated and Stump Pasture	310,674
Grassland	416,851
Brush	5,479
Barren	42,917
Total	777,724
FOREST LAND	
Timberland	
Producing	2,629,384
Deforested	208,693
Total	2,838,077
Subalpine	746,237
Rocky Noncommercial	124,372
Total	870,609
Total Forest Land	3,708,686
GROSS LAND AREA	4,486,410

1/ In the Northern Rocky Mountain Region.

The number of farms in Idaho County since 1880 as recorded in census reports

Year	Number of farms
1880	155
1890	487
1900	1,302
1910	1,469
1920	1,667
1930	1,371
1935	1,535

These figures are for the entire county; however, practically all of the farms are in the area covered by this report. According to the census, there were 2,160 gainfully employed persons in Idaho County in 1930 whose principal occupation was farming. The present area of cultivated land and stump-land pasture in the county is 310,674 acres, according to Survey estimates. In addition, there are 416,851 acres of grassland (figure 1) utilized for range.

Forest industry. - As already intimated, the lumber industry of Idaho County has been of a secondary nature, meeting principally local requirements. Sawmills were erected shortly following the gold discoveries of the sixties, in response to the urgent need for lumber. It is recorded that one such mill was built in 1863 near Elk City to supply two or three hundred thousand feet of flume lumber. It is said that there were 6 or 7 small sawmills operating in the gold districts during the second rush in the late nineties and early nineteen hundreds. The agricultural development was

likewise accompanied by the construction of sawmills to furnish building lumber.

The mills at Elk City and Florence in the early sixties were among the first in the State of Idaho, antedating by a decade or so the first sawmills north of Lewiston. However, the industry here never has expanded much beyond the local requirements as in other localities. As far as is known, there has been only one sawmill in this county which might be classed as large; that is, which has produced more than 5 million board feet of lumber in any one year. This mill, known as the Caribel mill and located east of Kamiah, had a very short active life, operating between 1918 and 1921. The majority of the mills individually have not produced more than a few thousand feet of lumber yearly. The earliest figure available showing the number of mills is for 1924. In this year there were 21 small plants operating in Idaho County north of the Salmon River, and in 1936 there were 17.

Since 1904 the mills of northern Idaho have turned out an average of 612 million board feet of lumber each year. The following representative figures indicate the small part which Idaho County has played in this production:

Production of Idaho County mills within Northern Rocky Mountain Region

Year	Lumber production (board feet lumber tally)
1920	15,857,000
1925	2,887,000
1930	1,035,000
1936	3,190,000

Since there has been no appreciable volume of logs exported from this county for manufacture into lumber, these figures are a reliable index of the size of the lumber industry. The production of sawlogs probably always has been greatly exceeded by the volume of fuelwood produced. In a fuelwood survey recently made, it was estimated that 36,000 cords are consumed yearly, of which 26,000 cords are dead timber.

The amount of employment the lumber industry has furnished is so small that it may be practically disregarded. However, forest industry as a whole is more important. Under the 1930 census headings, "Forestry and Fishing" and "Lumber and Furniture", a total of 246 Idaho County residents were reported as gainfully employed in these general industry groups. Besides those engaged in lumbering, this figure includes Forest Service employees, wood haulers, and such.

. . . . . .
. . . .

The importance of agriculture, mining, and forestry may be weighed on the basis of 1930 census employment figures. Assuming that each supports a portion of the secondary industry, such as the retail and professional groups in direct relation to its size, it is estimated, roughly, that 81 percent of the county population was at that time directly and indirectly dependent upon agriculture, 10 percent upon mining, and 9 percent upon forestry.

It has been mentioned already that the census figures used are for the whole county. According to tabulations by precincts, however, approximately 98 percent of the 10,107 persons in the county in 1930 resided in the area covered by this report. The rise and decline of the population since 1870 is shown in the following decennial census figures:

Population changes in Idaho County[1/] since 1870

Year	Population	Year	Population
1870	849	1910	12,384
1880	2,031	1920	11,749
1890	2,955	1930	10,107
1900	9,121		

1/ Entire county. Idaho County extended south of the present boundaries until 1881.

Forest Stands

The forest stands of northern Idaho may be classified into three general economic groups on the basis of commercial values. The most valuable area is designated as zone one timberland. This includes forest lands which are now growing or have grown stands of commercial types (that is, excluding subalpine and rocky noncommercial areas) and which are considered sufficiently accessible to be profitably logged under economic conditions which have prevailed in the past. Only 8 percent (424,449 acres) of the 5 million acres of zone one timberland in northern Idaho is in Idaho County. This low ratio is particularly striking since 36 percent of the total Panhandle forest area is in this county.

On the outer fringes of the zone one timberland is the zone two timberland which includes areas of commercial types which are too distant from the manufacturing centers to be profitably logged at present but which some day, through improved stumpage values, are likely to have conversion possibilities. Fifty-four percent (1,026,204 acres) of the north Idaho timberland in this zone is within Idaho County.

The third group may be termed noncommercial forest land. It includes timberland, classified as zone three, which quite definitely is economically inaccessible and also rocky noncommercial and subalpine areas. Most notable is the fact that there is a total of 2,258,033 acres of noncommercial forest land in Idaho County, which is approximately 70 percent of the total amount in northern Idaho.

Unless clearly understood, the zone one classification may be easily misinterpreted. The sawlog timber of this region has a wide variation of worth by tree species, ranging from the highly valuable white pine to those species of which only a small proportion can profitably be logged even in white pine operations. This has been particularly the case in the past few years, during which white pine has made up between 75 and 82 percent of the lumber produced, although it represents only one-fourth of the sawlog timber in northern Idaho. Since the zone is purely an area unit and timber

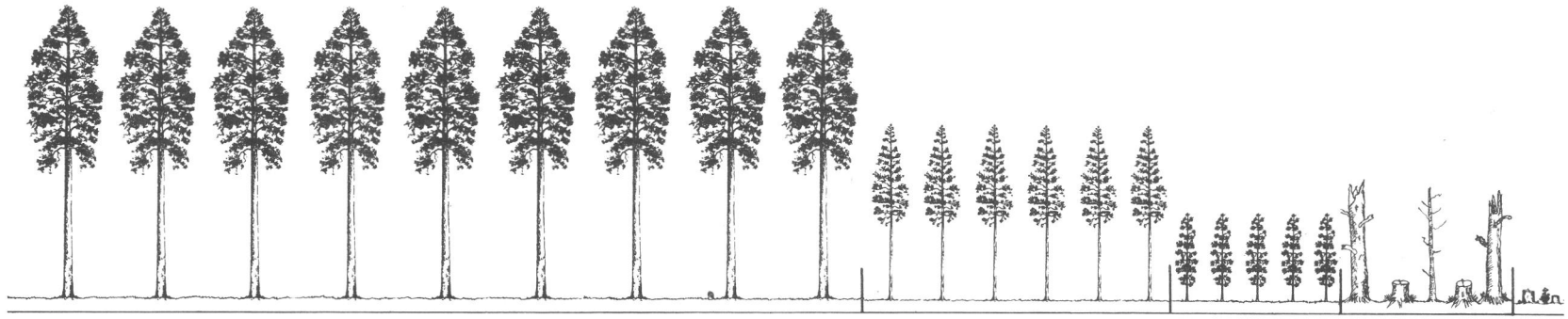
stands are typically a conglomerate mixture of species, it has been necessary, in the general white pine region, to zone on the basis of the white pine even in stands where it does not occur. In the general ponderosa pine region this and the kindred timber stands have been zoned on the basis of ponderosa pine which has, until the past decade, made up over one-fourth of the north Idaho timber cut for lumber. Consequently, a large portion of the volume of secondary species in zone one is in one sense mislabeled in that it cannot be profitably logged at present. This important qualification must be recognized for clear understanding of the timber volume statistics. For the young stands this consideration naturally is less important as the values being dealt with are largely potential and subject to changes which cannot be forecast.

The total forest area in Idaho County is 3,708,686 acres (table 2). Proportionally this acreage is far less valuable commercially than that in the rest of northern Idaho. Only 11 percent is timberland commercially accessible at present (zone one). Twenty-eight percent is timberland potentially accessible (zone 2), and 61 percent is noncommercial forest land.

Sawtimber stands. - Sawlog timber represents the largest single forest classification in Idaho County, occupying 32 percent of the total forest area. However, of the 1,182,168

Fig. 2

CHARACTER OF TIMBERLAND COVER IN ZONES ONE AND TWO IDAHO COUNTY,* IDAHO
1,450,653 ACRES



SAWLOG STANDS°
813,559 Acres

POLE STANDS°°
294,279 Acres

SEEDLING AND SAPLING STANDS
151,572 Acres

RECENT BURNS & CUTOVERS
145,245 Acres

DEFORESTED
45,998 Acres

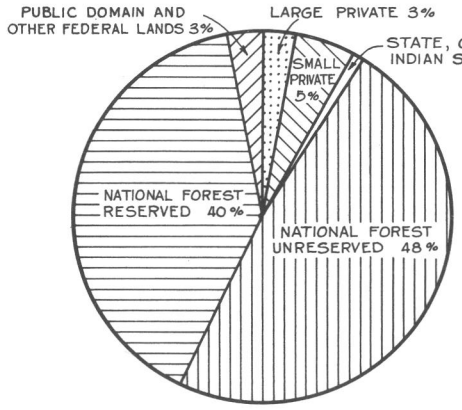
°Including Merchantable Cedar and Cedar-White Fir Pole Stands.

°°Including all Immature Cottonwood Stands.

Fig. 3

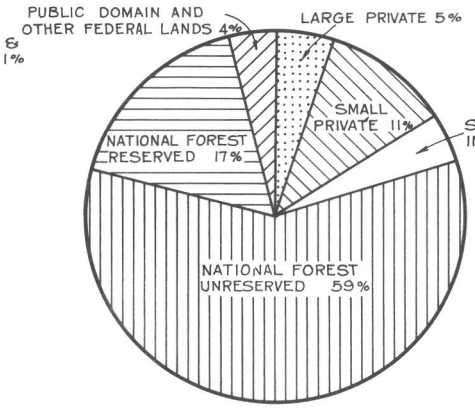
OWNERSHIP OF FOREST LAND AND TIMBER – IDAHO COUNTY,* IDAHO

ALL FOREST LAND


PUBLIC DOMAIN AND OTHER FEDERAL LANDS 3%
LARGE PRIVATE 3%
STATE, COUNTY & INDIAN SERVICE 1%
SMALL PRIVATE 5%
NATIONAL FOREST RESERVED 40%
NATIONAL FOREST UNRESERVED 48%

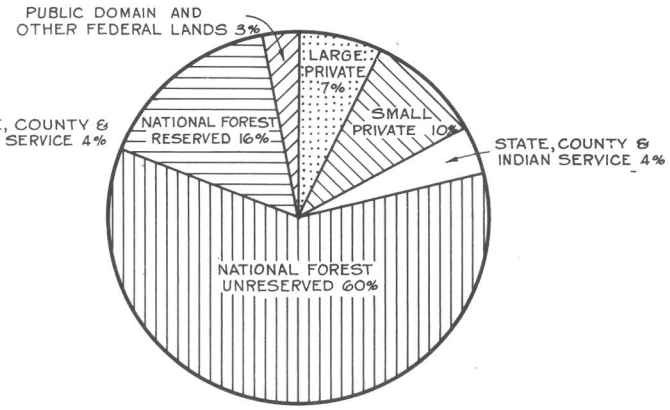
3,708,686 Acres

SAWLOG STANDS-ZONES ONE & TWO


PUBLIC DOMAIN AND OTHER FEDERAL LANDS 4%
LARGE PRIVATE 5%
SMALL PRIVATE 11%
STATE, COUNTY & INDIAN SERVICE 4%
NATIONAL FOREST RESERVED 17%
NATIONAL FOREST UNRESERVED 59%

813,559 Acres

VOLUME IN SAWLOG STAND ZONES ONE AND TWO


PUBLIC DOMAIN AND OTHER FEDERAL LANDS 3%
LARGE PRIVATE 7%
SMALL PRIVATE 10%
STATE, COUNTY & INDIAN SERVICE 4%
NATIONAL FOREST RESERVED 16%
NATIONAL FOREST UNRESERVED 60%

9,050,751,000 Board Feet

G.W.B.

FOR DEFINITION OF ZONES - SEE GLOSSARY.

*INCLUDING ONLY THE PORTION OF IDAHO COUNTY IN THE NORTHERN ROCKY MOUNTAIN REGION (SEE MAPS)

acres of sawlog timber only 23 percent is in zone one. Forty-six percent is in zone two and 31 percent is economically out of the picture in zone three. Thus, the commercially accessible (zones one and two) merchantable timber area is only 813,559 acres (figure 2). Averaging a little over 11 thousand board feet per acre, the total volume in the zone one and two sawtimber stands is 9,050,751,000 board feet log scale (tables 3, 4, 5).[2/] The zone three sawtimber stands, which average almost eight thousand board feet per acre, have a total timber inventory of 2,856,747,000 board feet.

White pine, the principal tree species in northern Idaho, commercially is of relatively limited occurrence in this county, representing only 2 percent of the total sawlog volume. Ponderosa pine and Douglas fir make up more than half of the volume, representing 32 percent and 24 percent, respectively, of the sawtimber in all three zones.

Pole, seedling and sapling stands. - The most striking feature about the pole, seedling and sapling areas is the high proportion of lodgepole pine in these stands. In the case of the sawlog stands only 3 percent of the total acreage is lodgepole pine type. In contrast, 57 percent of the pole

2/ From a commercial viewpoint the total volume might be considered as somewhat high, as, in the case of some of the secondary species, these estimates include smaller trees than are utilized at the present time.

stand area, 413,421 acres out of 720,289 acres, is lodgepole pine. In the seedling and sapling stands 56 percent of the area is of this type, 254,135 acres out of 457,114 acres. Only 9 percent of the total, 1,177,403 acres, in these two classes is ponderosa pine type. Sixty-two percent of this young timber area is in zone three, whereas about 81 percent of the lodgepole pine area is in this zone.

Burned and cutover areas. - Since time immemorial fires have raged in the rugged back country of Idaho County. Following the advent of the white man, the number of fires has been greater and the extent of the damage especially severe. The most recent of these conflagrations were the Selway fires of 1934, which are estimated to have covered 252,250 acres. The mark of the many fires is today found in an extensive unstocked area as well as the large area of young stands. The predominance of lodgepole pine in the young stands is also attributed to these fires.

Based on the knowledge that many burns reforest within a few years following the fires, where a seed source is available and other conditions satisfactory, the unstocked timberland areas are divided into two classes on the basis of potential restocking possibilities. Those areas which are still unstocked a number of years after the denuding fires are considered as more than likely to remain deforested for years to come and designated as "nonrestocked old burns and cutovers." Areas on which the deforesting fires have been more

recent, and which therefore have greater possibilities for soon restocking, are designated as "recent burns and cutovers." The dividing line between these two groups has been set arbitrarily at 1925.

Forest Survey estimates indicate a total of 208,693 acres of nonrestocked old burns and cutovers in the county. Only 22 percent of this acreage lies in zones one and two. The acreage of recent burns and cutovers is somewhat larger, totaling 269,813 acres. Fifty-four percent of this area is in zones one and two.

These burned area figures do not include the unstocked lands in subalpine and rocky noncommercial areas. The general locations of the unstocked timberlands are shown on the county map in the forepart of this publication.

Subalpine and rocky noncommercial areas. - The rugged mountains of Idaho County include almost 57 percent of the rocky noncommercial and subalpine area in northern Idaho. There are a total of 124,372 acres classified as rocky noncommercial forest land and 746,237 acres as subalpine stands in this county.

Forest Land Ownership

The Bitterroot Forest Reserve, one of the first national forests in Idaho, included the eastern portion of Idaho County. From this reservation, proclaimed by President Cleveland in 1897, the area of national forest has been increased to include 88 percent of the forest lands in

this county. Today the administration of this huge area is shared by the Nezperce, Clearwater, Lolo, and Bitterroot National Forests.

In recognition of the growing importance of recreation as a phase in forest administration, almost half (figure 3) of this national forest area has been set aside in the Selway-Bitterroot Primitive Area to meet the recreational needs as stated in the following declaration of purpose in the National Forest Manual:

> "To prevent the unnecessary elimination or impairment of unique natural values, and to conserve, so far as controlling economic considerations will permit, the opportunity to the public to observe the conditions which existed in the pioneer phases of the Nation's development, and to engage in the forms of outdoor recreation characteristic of that period; thus aiding to preserve national traditions, ideals, and characteristics, and promoting a truer understanding of historical phases of national progress."

Fulfillment of this objective is largely a matter of permitting only such roads and other improvements as are vitally necessary for adequate fire protection. Ideally suited for this type of reservation, the Selway-Bitterroot Primitive Area in Idaho County does not, despite its total area of 1,503,571 acres, represent any great economic loss in timber locked from use. Eighty-five percent of this area is classed as noncommercial forest land. Although the total volume in "reserved" sawtimber stands amounts to 3,091,475,000 board feet log scale, 54 percent is economically

inaccessible and only about one percent is in zone one. The economic importance of these reserved stands is shown in the following tabulation:

Volume in sawtimber stands, Idaho County, in the Northern Rocky Mountain Region

	Board feet log scale	Percent
EXPLOITABLE		
Accessible (zones 1 & 2) and available for cutting	7,624,705,000	64
NONEXPLOITABLE		
Accessible (zones 1 & 2) but reserved	1,426,046,000	12
Inaccessible (zone 3)	2,856,747,000	24
Total	11,907,498,000	100

In this connection it should be remembered that, while the "Exploitable" 7.6 billion board feet may rightly be considered as a sizable reservoir for future exploitation, from the standpoint of the lumber industry, which is based largely upon white pine and ponderosa pine, this figure by itself is not significant as there is a total of but 1.6 billion board feet of ponderosa pine and white pine in zone one. Thus, only slightly more than one-tenth of the sawtimber in Idaho County is, at present, commercially important.

A comparison of national forest land with the forest land in other ownerships reveals a significantly higher percentage of better stands in the latter. Although all but 12 percent of the total forest area in Idaho County is included in the national forests, 48 percent of the zone one forest

land and 42 percent of the zone one sawlog stand area are owned either privately or by other public agencies. An index of the comparative quality of the forest lands in the several major classes of ownership is given in the following tabulation reduced from table 2:

Ownership of forest land in Idaho County in the Northern Rocky Mountain Region

		Zone one timberland	Zone two timberland	Noncommercial forest land	Total
Nat'l Forest Unreserved	Acres	221,066	661,092	891,876	1,774,034
	%	13	37	50	100
Nat'l Forest Reserved	Acres	1,130	226,074	1,276,367	1,503,571
	%	---	15	85	100
Private	Acres	144,559	72,347	57,713	274,619
	%	53	26	21	100
Other Public Owners	Acres	57,694	66,691	32,077	156,462
	%	37	43	20	100
Total	Acres	424,449	1,026,204	2,258,033	3,708,686
	%	11	28	61	100

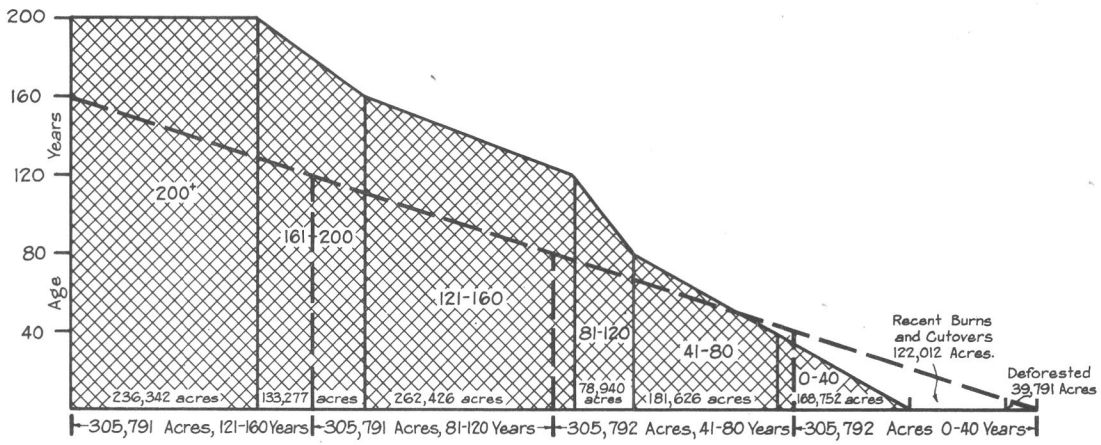
Forest Land Use

The extent to which the timber utilization industry may grow in this county is largely dependent upon economic developments of national character. However, there are no present indications that there will be any material increase in forest exploitation in the near future. An increase in timber utilization is certainly desirable, as the 1,223,449 acres of exploitable timberland,[3/] with adequate fire

3/ Commercial timberland that is not reserved for recreation.

Fig. 4

ACTUAL AND DESIRABLE DISTRIBUTION OF AGE CLASSES IN ZONES ONE AND TWO TIMBERLANDS AVAILABLE FOR COMMERCIAL LOGGING IDAHO COUNTY,* IDAHO 1,223,166 ACRES°



Desirable Distribution of Age Classes for Sustained Yield Shown by Dotted Lines.

° Cottonwood not Included

Fig. 5

VOLUME IN TIMBER STANDS BY SPECIES IDAHO COUNTY,* IDAHO

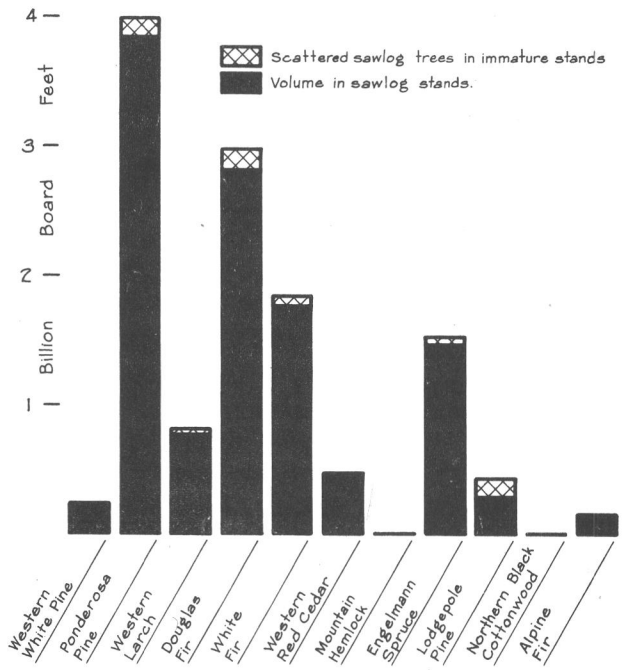
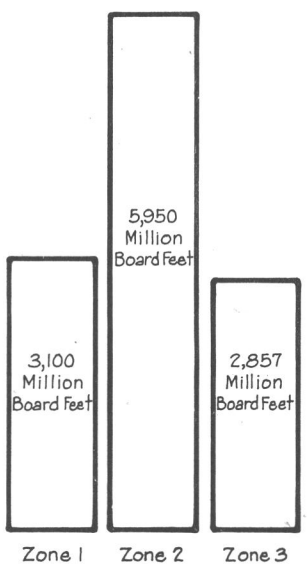


Fig. 6

VOLUME IN SAWLOG STANDS BY ZONES IDAHO COUNTY,* IDAHO



G.W.B. FOR DEFINITION OF ZONES SEE GLOSSARY

* INCLUDES ONLY THE PORTION OF IDAHO COUNTY IN THE NORTHERN ROCKY MOUNTAIN REGION (SEE MAPS)

protection, are capable of permanently sustaining a production greatly in excess of the present cutting drain. In general, as is shown in figure 4, the growing stock on this area is more than satisfactory for the adoption of sustained yield. Only 3 percent of the exploitable timber volume is white pine so there is no possibility of the reduced logging in this county compensating for the heavy drain of white pine elsewhere in northern Idaho.

It is difficult to reduce those indirect forest values, watershed protection and recreational opportunities, to measurable terms, yet unquestionably their combined worth exceeds the present or potential benefits derived from the forest industry as such. An abundant water supply for irrigation and power has been one of the principal assets of the great drainage area of the Columbia and Snake Rivers. In protecting the mountain headwaters from excessive erosion and in regulating the year-round water flow from this great area the forests of Idaho County play a decidedly important part in assuring the continued prosperity of the plains country below. This mountainous backcountry is today very much the same as when the pioneers gazed upon it from the Indian trails--still rich in wildlife and scenic splendor. Looking ahead to a more intensively developed West, the wisdom of preserving a portion of this disappearing wilderness as a primitive recreational unit is readily apparent. The investment in

protection and withheld timber may be expected to pay increasing dividends with the passing generations.

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This brief preliminary report presents only a small part of the Forest Survey information available for Idaho County. Survey data will be presented and analyzed more fully in reports for the economic unit of which Idaho County is a part.

Attention is called to the brief glossary at the end of this report. More complete definitions of terms used in the Survey, and explanations of Survey procedure and classifications, are available in an earlier release.[4/]

The data in this report are preliminary and subject to correction in future releases.

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. . . .

Inventory Phase--Idaho County, Idaho

P. D. Kemp and G. M. DeJarnette, In Charge

Typemapping	Check Cruising	Compilation
T. E. Rowland	P. N. Pratt	W. L. Royer
R. L. Wrights	J. M. Honeywell	O. B. Johnson
W. F. Guntermann		J. J. McHugh
E. R. Marks		A. W. Carlson
A. E. Spaulding		R. J. Smith
J. N. Hessel		M. E. Metcalf
J. L. Frykman		R. L. Conn
R. G. Gallup		H. J. Pissot
A. L. Dodge		F. Hughes
R. J. Smith		

Report writing--S. B. Hutchison

4/ Forest Survey Release No. 3. The Inventory Phase of the Forest Survey for the Northern Rocky Mountain Region--A Definition of the Procedure, Terms, and Classifications.

RE-NFM
Forest Survey

Table 2. CLASSIFICATION OF FOREST LAND TYPES ACCORDING TO OWNERSHIP, ZONE AND SIZE CLASS
IDAHO COUNTY[1], IDAHO

Area in acres

(Continued on next page)

Forest type	Zone	Large private					Small private					State[2]					County					Indian Service				
		Sawlog	Pole	Seedling and sapling	Recent burns & cutovers	Total	Sawlog	Pole	Seedling and sapling	Recent burns & cutovers	Total	Sawlog	Pole	Seedling and sapling	Recent burns & cutovers	Total	Sawlog	Pole	Seedling and sapling	Recent burns & cutovers	Total	Sawlog	Pole	Seedling and sapling	Recent burns & cutovers	Total
White pine	1	449				449	78				78	187			210	397										
	2														410	410										
	3																									
	Total	449				449	78				78	187			620	807										
Ponderosa pine-pure	1	2,762	561			3,323	37,059	20,314	3,323		60,696	10,800	656	231		11,687	296	15			311	122	470			592
	2	348	143			491	11,799	4,677	437	32	16,945	3,823	838	8	1,546	6,215	28				28					
	3						302	22			324	152				152										
	Total	3,110	704			3,814	49,160	25,013	3,760	32	77,965	14,775	1,494	239	1,546	18,054	324	15			339	122	470			592
Ponderosa pine-mixed	1	735	379		2	1,116	27,319	13,870	6,171	2,507	49,867	4,406	1,496	574	60	6,536	51	171	35	187	444	847	652	2	210	1,711
	2	312				312	1,591	1,018	6	438	3,053	1,258		5	155	1,418										
	3						160	87	3		250		292			292										
	Total	1,047	379		2	1,428	29,070	14,975	6,180	2,945	53,170	5,664	1,788	579	215	8,246	51	171	35	187	444	847	652	2	210	1,711
Ponderosa pine-total	1	3,497	940		2	4,439	64,378	34,184	9,494	2,507	110,563	15,206	2,152	805	60	18,223	347	186	35	187	755	969	1,122	2	210	2,303
	2	660	143			803	13,390	5,695	443	470	19,998	5,081	838	13	1,701	7,633	28				28					
	3						462	109	3		574	152	292			444										
	Total	4,157	1,083		2	5,242	78,230	39,988	9,940	2,977	131,135	20,439	3,282	818	1,761	26,300	375	186	35	187	783	969	1,122	2	210	2,303
Larch-Douglas fir	1	42				42	1,082	206	317	154	1,759	208		21		229	29		115	123	267					
	2	15,769		262		16,031	37	346			383	151	56			207										
	3	2,074	748		241	3,063	255				255	45				45										
	Total	17,885	748	262	241	19,136	1,374	552	317	154	2,397	404	56	21		481	29		115	123	267					
Hemlock-white fir	1						1,467	140	150		1,757	5,836				5,836										
	2						72				72	108				108										
	3											178				178										
	Total						1,539	140	150		1,829	6,122				6,122										
Douglas fir	1	82	77	5		164	4,293	7,273	2,128	1,938	15,632	1,580	2,009	253		3,842		111			111		310	45		355
	2	5,685		246		5,931	2,877	4,671	466	570	8,584	2,174	953	215	8	3,350										
	3	1,671	709			2,380	45		2		47	741				741										
	Total	7,438	786	251		8,475	7,215	11,944	2,596	2,508	24,263	4,495	2,962	468	8	7,933		111			111		310	45		355
Engelmann spruce	1						253				253															
	2	11,605		394		11,999		51		40	91															
	3	1,634		46		1,680	6				6															
	Total	13,239		440		13,679	259	51		40	350															
Lodgepole pine	1			6		6		397	25		422															
	2	480	84	517		1,081	110	3,982	2,612		6,704		578	490		1,068		70			70					
	3	10,673	2,806	4,131		17,610		968			968															
	Total	11,153	2,890	4,654		18,697	110	5,347	2,637		8,094		578	490		1,068		70			70					
Western red cedar[4/5]	1	1,037				1,037				575	575	3		102	900	1,005										
	2	316				316																				
	3																									
	Total	1,353				1,353				575	575	3		102	900	1,005										
Cedar-white fir[4]	1	73				73	867	817	548	1,034	3,266	2,129	1,068	116	557	3,870				87	87					
	2						98				98															
	3						82				82															
	Total	73				73	1,047	817	548	1,034	3,446	2,129	1,068	116	557	3,870				87	87					
Cottonwood[6]	1						53	230			283															
	Total						53	230			283															
Total producing timberland	1	5,180	1,017	11	2	6,210	72,471	43,247	12,662	6,208	134,588	25,149	5,229	1,297	1,727	33,402	376	297	150	397	1,220	969	1,432	47	210	2,658
	2	34,515	227	1,419		36,161	16,584	14,745	3,521	1,080	35,930	7,514	2,425	718	2,119	12,776	28	70			98					
	3	16,052	4,263	4,177	241	24,733	850	1,077	5		1,932	1,116	292			1,408										
	Total	55,747	5,507	5,607	243	67,104	89,905	59,069	16,188	7,288	172,450	33,779	7,946	2,015	3,846	47,586	404	367	150	397	1,318	969	1,432	47	210	2,658
Nonrestocked old burns and cutovers	1	143				143					3,618					773					119					
	2	20				20					236					41										
	3	167				167					62															
	Total	330				330					3,916					814					119					
Total timberland	1	6,353				6,353					138,206					34,175					1,339					2,658
	2	36,181				36,181					36,166					12,817					98					
	3	24,900				24,900					1,994					1,408										
	Total	67,434				67,434					176,366					48,400					1,437					2,658
Subalpine and rocky noncommercial	1	12				12					997					15										
	2	240				240					744					104										
	3	27,335				27,335					1,491															
	Total	27,587				27,587					3,232					119										
GROSS FOREST AREA	1	6,365				6,365					139,203					34,190					1,339					2,658
	2	36,421				36,421					36,910					12,921					98					
	3	52,235				52,235					3,485					1,408										
	Total	95,021				95,021					179,598					48,519					1,437					2,658

1/ In Northern Rocky Mountain Region.
2/ Available for conversion.
3/ Federal powersite withdrawals.
4/ In this table merchantable cedar and cedar-white fir pole stands are classed with sawlog stands.
5/ For the western red cedar type, pole, seedling and sapling stands are grouped in one class.
6/ All immature cottonwood stands are grouped in one class.

Data as of January 1, 1938.

KE-KHH
Forest Survey

Table 2. CLASSIFICATION OF FOREST LAND TYPES ACCORDING TO OWNERSHIP, ZONE AND SIZE CLASS

IDAHO COUNTY[1], IDAHO

(Continued from preceding page)

Area in acres

Forest type	Zone	National Forest: Available for conversion: Sawlog	Pole	Seedling and sapling	Recent burns & cutovers	Total	National Forest: Reserved: Sawlog	Pole	Seedling and sapling	Recent burns & cutovers	Total	Public domain: Sawlog	Pole	Seedling and sapling	Recent burns & cutovers	Total	Other Federal lands[3]: Sawlog	Pole	Seedling and sapling	Recent burns & cutovers	Total	Total: Sawlog	Pole	Seedling and sapling	Recent burns & cutovers	Total	Total available for conversion: Sawlog	Pole	Seedling and sapling	Recent burns & cutovers	Total
White pine	1	21,239	1,782	8,851	919	32,191	320				320						195				195	22,468	1,782	8,851	1,129	33,630	22,148	1,782	1,851	1,129	33,310
	2	10,078	633	2,472	18,257	31,434	989		1,500	545	3,034						475		48		523	11,536	633	4,020	19,212	35,401	10,547	633	2,520	18,667	32,367
	3	109	303	1,490	668	2,570			365	411	776											109	303	1,855	1,079	3,346	109	303	1,490	668	2,570
	Total	31,420	2,718	12,813	19,844	66,195	1,309		1,865	956	4,130						670		48		718	34,113	2,718	14,126	21,420	72,377	32,804	2,718	12,861	20,464	68,247
Ponderosa pine-pure	1	45,666	496	65		46,227						3,338	1,030			4,368	2,980	214			3,194	103,023	23,756	3,619		130,398	103,023	23,756	3,619		130,398
	2	57,181	1,263	52	254	58,760	69,199	238		3,986	73,423	704	290			994	8,124	47		1,135	9,306	151,206	7,496	507	6,953	166,162	82,007	7,258	507	2,967	92,739
	3	11,649	806	158		12,613	27,016	1,137	1,382	67	29,602						2,034				2,034	41,153	1,965	1,540	67	44,725	14,137	828	158		15,123
	Total	114,496	2,565	285	254	117,600	96,215	1,375	1,382	4,053	103,025	4,042	1,320			5,362	13,138	261		1,135	14,534	295,382	33,217	5,666	7,020	341,285	199,167	31,842	4,284	2,967	238,260
Ponderosa pine-mixed	1	31,971	2,626	1,588	215	36,400						911	805	154	42	1,912	1,629	339	45	36	2,049	67,869	20,338	8,569	3,259	100,035	67,869	20,338	8,569	3,259	100,035
	2	38,108	4,763	9,684	22,202	74,752	35,201	11,875	3,794	9,725	60,595	1,201	171	527	145	2,044	4,533	1,266	634	1,667	8,100	82,199	19,093	14,650	34,332	150,274	46,998	7,218	10,856	24,607	89,679
	3	6,160	700	943	2,081	9,884	11,184	2,990	863	3,456	18,493		91			91	17	65			82	17,521	4,225	1,809	5,737	29,292	6,337	1,235	946	2,061	10,599
	Total	76,234	8,089	12,215	24,498	121,036	46,385	14,865	4,657	13,181	79,088	2,112	1,067	681	187	4,047	6,179	1,670	679	1,703	10,231	167,589	43,656	25,028	43,328	279,601	121,204	28,791	20,371	29,947	200,313
Ponderosa pine total	1	77,637	3,122	1,653	215	82,627						4,249	1,835	154	42	6,280	4,609	553	45	36	5,243	170,892	44,094	12,188	3,259	230,433	170,892	44,094	12,188	3,259	230,433
	2	95,289	6,026	9,736	22,456	133,512	104,400	12,113	3,794	13,711	134,018	1,905	461	527	145	3,038	12,657	1,313	634	2,802	17,406	233,405	26,589	15,157	41,285	316,436	80,474	2,063	1,104	2,081	85,722
	3	17,809	1,506	1,101	2,081	22,497	38,200	4,127	2,245	3,723	48,295		91			91	2,051	65			2,116	58,674	6,190	3,349	5,804	74,017	6,337	1,235	946	2,061	10,599
	Total	190,730	10,654	12,500	24,752	238,636	142,600	16,240	6,039	17,434	182,313	6,154	2,387	681	187	9,409	19,317	1,931	679	2,838	24,765	462,971	76,873	30,694	50,348	620,886	320,371	60,633	24,655	32,914	436,573
Larch-Douglas fir	1	9,250	688	810		10,728						45				45	408		86		494	11,064	874	1,349	277	13,564	11,064	874	1,349	277	13,564
	2	57,986	27,798	11,378	5,629	102,790	7,409		30	7,439	451	2,659	288			3,398	713		199		912	82,515	30,789	12,127	5,659	131,090	75,106	30,789	12,127	5,639	123,651
	3	15,663	2,755	5,752	6	24,176	4,614	4,481	2,644	2,434	14,173	140				140				5	5	22,791	7,984	8,396	2,686	41,857	18,177	3,503	5,752	252	27,684
	Total	82,898	31,151	17,940	5,635	137,624	12,023	4,481	2,644	2,464	21,612	636	2,659	288		3,583	1,121		285	5	1,411	116,370	39,647	21,872	8,622	186,511	104,347	35,166	19,228	6,158	164,899
Hemlock-white fir	1	6,767	2,160	480		9,347							8	131		139	36	231	134		401	14,106	2,539	835		17,480	14,106	2,539	835		17,480
	2	70,036	5,702	3,061	734	79,533						319		556		875	852	72			924	71,387	5,774	3,617	734	81,512	71,387	5,774	3,617	734	81,512
	3	38,426	2,373	12,320	105	53,224	739	451		1,647	2,837	252				252						39,595	2,824	12,320	1,752	56,491	38,856	2,373	12,320	105	53,654
	Total	115,229	10,235	15,801	839	142,104	739	451		1,647	2,837	571	8	687		1,266	888	303	134		1,325	125,088	11,137	16,772	2,486	155,483	124,349	10,686	16,772	839	152,646
Douglas fir	1	8,719	5,029	891	6,821	21,460	11				11	175	1,510	15	80	1,700	447	203	103	466	1,219	15,307	16,522	3,440	9,225	44,494	15,296	16,522	3,440	9,225	44,483
	2	48,999	23,874	9,952	20,590	103,415	7,138	24,029	8,310	2,929	42,406	1,545	2,706	698	80	5,029	1,154	1,107	368	2,759	5,388	69,572	57,340	20,255	26,936	174,103	62,434	33,311	11,945	24,007	131,697
	3	29,063	16,405	24,642	24,046	94,156	90,136	53,573	28,989	56,684	231,382	257				257	1,627	299	929	5,868	8,723	123,540	70,986	54,563	88,598	337,686	33,404	17,413	25,573	29,914	106,304
	Total	86,781	45,308	35,485	51,457	219,031	97,285	77,602	37,299	61,613	273,799	1,977	4,216	713	80	6,986	3,228	1,609	1,400	9,093	15,330	208,419	144,848	78,257	124,759	556,283	111,134	67,246	40,958	63,146	282,484
Engelmann spruce	1	2,362				2,362											2,615				2,615	2,615				2,615	2,615				2,615
	2	16,215	6	1,740		17,961	15,460		1,618	1,426	18,504		41			41	34				34	43,314	98	3,752	1,466	48,630	27,854	98	2,134	40	30,126
	3	13,635	6,878	2,082	71	22,666	67,018	5,972	5,479	5,742	84,211											82,293	12,850	7,607	5,813	108,563	15,275	6,878	2,128	71	24,352
	Total	32,212	6,884	3,822	71	42,989	82,478	5,972	7,097	7,168	102,715		41			41	34				34	128,222	12,948	11,359	7,279	159,808	45,744	6,976	4,262	111	57,093
Lodgepole pine	1	79	3,868	85		4,032																79	4,265	116		4,460	79	4,265	116		4,460
	2	710	73,317	29,054	128	103,209	427	3,006	3,364		6,797		3,446	4,313		7,759		95	70		165	1,727	84,578	40,420	128	126,853	1,300	81,572	37,056	128	120,056
	3	5,368	229,409	120,689	2,944	358,410	20,426	91,395	88,649	9,295	209,765								130		130	36,467	324,578	213,599	12,239	586,883	16,041	233,183	124,950	2,944	377,118
	Total	6,157	306,594	149,828	3,072	465,651	20,853	94,401	92,013	9,295	216,562		3,446	4,313		7,759		95	200		295	38,273	413,421	254,135	12,367	718,196	17,420	319,080	162,122	3,072	501,634
Western red cedar[4/5]	1	5,088		750		5,838	251				251								168		168	6,379		1,020	1,475	8,874	5,128		1,020	1,475	8,623
	2	2,634		254	1,822	4,710	295				295						408				408	3,653		254	1,822	5,729	3,358		254	1,822	5,434
	3	212		775		987	1,369				1,369						101				101	1,682		775		2,457	313		775		1,088
	Total	7,934		1,779	1,822	11,535	1,915				1,915						509		168		677	11,714		2,049	3,297	17,060	8,799		2,049	3,297	15,145
Cedar-white fir[4/]	1	25,923	13,451	8,708	1,228	49,310	548				548		15			15	226	1,663	541	30	2,460	29,756	17,014	9,913	2,936	59,629	29,218	17,014	9,913	2,936	59,081
	2	17,535	1,047	13,905	22,866	55,353	2,671	111		4,592	7,374						3,417		953	2,244	6,614	23,721	1,158	14,858	25,110	62,065	21,050	1,047	14,858	25,110	62,065
	3	1,767		2,424	396	4,587	1,609	295	655	5,237	7,796									964	964	3,458	295	3,079	6,597	13,429	1,849		2,424	1,360	5,633
	Total	45,225	14,498	25,037	24,490	109,250	4,828	406	655	9,829	15,718		15			15	3,643	1,663	1,494	3,238	10,038	56,945	18,467	27,850	34,636	137,896	52,117	18,061	27,195	29,406	126,779
Cottonwood[6/]	1																					53	230			283	53	230			283
	Total																					53	230			283	53	230			283
Total producing timberland	1	157,064	30,080	21,568	9,183	217,895	1,130				1,130	4,469	3,368	300	42	8,179	5,921	2,650	1,077	532	10,180	272,729	87,320	37,112	18,301	415,462	271,599	87,320	37,112	18,301	414,332
	2	319,470	138,333	81,562	92,482	631,847	138,789	39,259	18,586	23,233	219,867	4,220	9,313	6,382	225	20,140	19,710	2,587	2,272	7 905	32,374	540,830	206,959	114,460	126,944	989,193	402,041	167,700	95,874	103,711	769,326
	3	122,052	259,629	171,275	30,317	583,273	224,111	160,294	129,026	87,173	600,604	649	91			740	3,779	364	1,059	6,837	12,039	368,609	426,010	305,548	124,568	1,224,729	144,498	265,716	176,516	37,395	624,125
	Total	598,586	428,042	274,405	131,982	1,433,015	364,030	199,553	147,612	110,406	821,601	9,338	12,772	6,682	267	29,059	29,410	5,601	4,408	15,174	54,593	1,182,168	720,289	457,114	269,813	2,629,384	818,138	520,736	309,502	159,407	1,807,783
Nonrestocked old burns and cutovers	1					3,171										721					442					8,987					8,987
	2					29,245					6,207					341					921					37,011					30,804
	3					70,112					90,023										2,331					162,695					72,672
	Total					102,528					96,230					1,062					3,694					208,693					112,463
Total timberland	1					221,066					1,130					8,900					10,622					424,449					423,319
	2					661,092					226,074					20,481					33,295					1,026,204					800,130
	3					653,385					690,627					740					14,370					1,367,484					696,797
	Total					1,535,543					917,831					30,121					58,287					2,836,077					1,920,246
Subalpine and rocky noncommercial	1					115										38					99					1,276					1,276
	2					6,597										1,015					4,282					12,980					12,980
	3					231,779					585,740										10,008					856,353					270,613
	Total					238,491					585,740					1,051					14,389					870,609					284,869
GROSS FOREST AREA	1					221,181					1,130					8,938					10,721					425,725					424,595
	2					667,689					226,074					21,496					37,577					1,039,184					813,110
	3					885,164					1,276,367					740					24,378					2,243,777					967,410
	Total					1,774,034					1,503,571					31,172					72,676					3,708,686					2,205,115

1/ In Northern Rocky Mountain Region
2/ Available for conversion
3/ Federal powersite withdrawals.
4/ In this table merchantable cedar and cedar-white fir pole stands are classed with sawlog stands.
5/ For the western red cedar type, pole, seedling and sapling stands are grouped in one class.
6/ All immature cottonwood stands are grouped in one class.

Data as of January 1, 1938.

RE-NRM
Forest Survey

Table 3. TOTAL VOLUME OF SAWTIMBER BY TYPE OF STAND, SPECIES AND OWNERSHIP
IDAHO COUNTY[1], IDAHO

Ownership class	Volume by species - thousand board feet log scale (Scribner)												Pieces
	Western white pine	Ponderosa pine	Western larch	Douglas fir	White fir	Western red cedar	Mountain hemlock	Engelmann spruce	Lodgepole pine	Northern black cottonwood	Alpine fir	Total	Cedar poles
Sawlog stands[2] (all zones)													
Large private	10,877	55,022	121,882	175,767	11,152	38,481		222,996	58,837[5]		42,419	737,433	56
Small private	1,017	601,538	22,277	189,547	69,844	4,219		3,842	1,016	212	13	893,525	425
State	1,111	181,513	4,550	77,743	62,280	8,273		2,425	1,050			338,945	13,185
County		3,999	257	715	205							5,176	
Indian Service		3,291		1,805								5,096	
National Forest (available)	215,024	1,768,146	547,960	1,510,720	1,459,901	306,767	378	489,513	113,544[6]	30	67,441	6,479,424	477,595
National Forest (reserved)	15,820	1,042,166	78,692	803,401	139,119	84,958		745,847	123,779[7]		57,693	3,091,475	39,361
Public domain		37,143	2,321	22,325	8,078			1,080	1,307			72,254	
Other Federal lands[3]	7,313	148,784	6,427	47,303	33,825	31,285		8,308	859		66	284,170	33,348
Total	251,162	3,841,602	784,366	2,829,326	1,784,404	473,983	378	1,474,011	300,392	242	167,632	11,907,498	563,970
Available for conversion	235,342	2,799,436	705,674	2,025,925	1,645,285	389,025	378	728,164	176,613	242	109,939	8,816,023	524,609
Scattered sawlog trees in immature stands[4] (all zones)													
Large private		1,321	507	240	40			157	1,245		131	3,641	
Small private		59,217	1,249	15,875	2,897	321		524	1,840		44	81,967	250
State		5,484	10	3,445	1,396	553			843			11,731	215
County		439	111	200	23	23						796	
Indian Service		1,751		701								2,452	
National Forest (available)	366	31,256	27,204	53,228	41,452	7,551		42,400	89,110		9,307	301,874	6,268
National Forest (reserved)		27,226	100	81,114	14,319	716		6,545	17,238		1,541	148,799	
Public Domain		7,168	83	2,834	134			82	1,344			11,645	
Other Federal lands[3]		8,358	72	3,353	1,937	885		36				14,641	956
Total	366	142,220	29,336	160,990	62,198	10,049		49,744	111,620		11,023	577,546	7,689
Available for conversion	366	114,994	29,236	79,876	47,879	9,333		43,199	94,382		9,482	428,747	7,689
GRAND TOTAL	251,528	3,983,822	813,702	2,990,316	1,846,602	484,032	378	1,523,755	412,012	242	178,655	12,485,044	571,659
Grand total available for conversion	235,708	2,914,430	734,910	2,105,801	1,693,164	398,358	378	771,363	270,995	242	119,421	9,244,770	532,298

Data as of January 1, 1938.

1/ In Northern Rocky Mountain Region.
2/ Includes the volume in cedar and cedar-white fir merchantable pole stands.
3/ Federal powersite withdrawals.
4/ Includes 51,348 thousand board feet on deforested, recently cut and burned, etc., areas.
5/ Includes 858 thousand board feet of whitebark pine.
6/ Includes 37 thousand board feet of whitebark pine.
7/ Includes 1,737 thousand board feet of whitebark pine.

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Table 4. VOLUME OF SAWTIMBER IN SAWLOG STANDS[1] BY ZONE, OWNERSHIP AND SPECIES
IDAHO COUNTY[2], IDAHO

Ownership class	Volume by species - thousand board feet log scale (Scribner)												Pieces
	Western white pine	Ponderosa pine	Western larch	Douglas fir	White fir	Western red cedar	Mountain hemlock	Engelmann spruce	Lodgepole pine	Northern black cottonwood	Alpine fir	Total	Cedar poles
Zone 1													
Large private	3,795	40,055	3,706	12,692	3,569	25,704		2,335	180		1,130	93,166	
Small private	1,017	494,524	18,927	151,587	61,479	3,611		1,425	56	212	4	732,842	
State	1,111	136,848	3,683	50,824	54,536	8,273		168				255,443	13,185
County		3,369	257	645	205							4,476	
Indian Service		3,291		1,805								5,096	
National Forest (available)	143,325	743,012	96,329	384,125	305,325	177,566		37,925	4,851	30	514	1,893,002	397,765
National Forest (reserved)	4,854	77	1,368	4,648	6,157	16,638		734	548			35,024	
Public Domain		23,580	192	6,807	410			11	9			31,009	
Other Federal lands[3]	1,267	31,540	1,469	11,264	4,497	317		11				50,365	1,792
Total	155,369	1,476,296	125,931	624,397	436,178	232,109		42,609	5,644	242	1,648	3,100,423	412,742
Available for conversion	150,515	1,476,219	124,563	619,749	430,021	215,471		41,875	5,096	242	1,648	3,065,399	412,742
Zone 2													
Large private	6,983	14,070	106,844	145,541	6,914	12,316		199,543	13,253[4]		35,738	541,202	56
Small private		104,882	479	36,298	7,838	116		2,357	595		9	152,574	425
State		43,601	580	22,169	5,514			1,516	203			73,583	
County		630		70								700	
Indian Service													
National Forest (available)	67,966	905,303	358,859	866,561	840,389	112,564	378	297,421	57,728		40,998	3,548,167	72,114
National Forest (reserved)	10,066	814,144	55,183	256,412	29,785	25,131		173,650	17,033[5]		9,618	1,391,022	28,109
Public Domain		13,563	1,418	13,685	6,095			812	890			36,463	
Other Federal lands[3]	5,953	103,998	4,837	27,204	25,996	29,809		8,077	677		66	206,617	31,297
Total	90,968	2,000,191	528,200	1,367,940	922,531	179,936	378	683,376	90,379		86,429	5,950,328	132,001
Available for conversion	80,902	1,186,047	473,017	1 111,528	892,746	154,805	378	509,726	73,346		76,811	4,559,306	103,892
Zone 3													
Large private	99	897	11,332	17,534	669	461		21,118	45,404[6]		5,551	103,065	
Small private		2,132	2,871	1,662	527	492		60	36			8,109	
State		1,064	287	4,750	2,230			741	847			9,919	
National Forest (available)	3,733	119,831	92,772	260,034	314,187	16,637		154,167	50,965[7]		25,929	1,038,255	7,716
National Forest (reserved)	900	227,945	22,141	542,341	103,177	43,189		571,463	106,198[8]		48,075	1,665,429	11,252
Public domain			711	1,833	1,573			257	408			4,782	
Other Federal lands[3]	93	13,246	121	8,835	3,332	1,159		220	182			27,188	259
Total	4,825	365,115	130,235	836,989	425,695	61,938		748,026	204,369		79,555	2,856,747	19,227
Available for conversion	3,925	137,170	108,094	294,648	322,518	18,749		176,563	98,171		31,480	1,191,318	7,975
GRAND TOTAL	251,162	3,841,602	784,366	2,829,326	1,784,404	473,983	378	1,474,011	300,392	242	167,632	11,907,498	563,970
Grand total available for conversion	235,342	2,799,436	705,674	2,025,925	1,645,285	389,025	378	728,164	176,613	242	109,939	8,816,023	524,609

1/ Includes volume in cedar and cedar-white fir merchantable pole stands.
2/ In Northern Rocky Mountain Region.
3/ Federal powersite withdrawals.
4/ Includes 156 thousand board feet of whitebark pine.
5/ Includes 132 thousand board feet of whitebark pine.
6/ Includes 702 thousand board feet of whitebark pine.
7/ Includes 37 thousand board feet of whitebark pine.
8/ Includes 1,605 thousand board feet of whitebark pine.

Data as of January 1938.

Table 5. VOLUME OF SAWTIMBER IN SAWLOG STANDS BY TYPE, ZONE AND SPECIES

IDAHO COUNTY[1], IDAHO

Timber type	Volume by species - thousand board feet log scale (Scribner)												Pieces
	Western white pine	Ponderosa pine	Western larch	Douglas fir	White fir	Western red cedar	Mountain hemlock	Engelmann spruce	Lodgepole pine	Northern black cottonwood	Alpine fir	Total	Cedar poles
Zone 1													
Western white pine	125,331	19,823	29,227	67,841	48,247	26,000		10,126	1,558		1,316	329,469	116,144
Ponderosa pine-pure		1,042,993	9,629	119,215	17,124				12		4	1,188,977	
Ponderosa pine-mixed	470	360,608	35,312	202,835	88,100	1,981		3,897	1,938	30		695,171	5,971
Larch-Douglas fir	2,122	8,713	30,370	37,790	14,291	848		2,959	638			97,731	8,766
Hemlock-white fir		8,603	3,260	20,467	71,566	1,317		4,830	333			110,376	
Douglas fir	6,879	16,864	1,467	94,794	39,345	11,399		946	164			171,858	37,671
Engelmann spruce		464	584	4,903	3,496			11,646				21,093	
Lodgepole pine				38	76				354			468	
Western red cedar[2]	7,355	211	5,047	14,722	12,694	120,137		6,072	442		328	167,008	47,979
Cedar-white fir[2]	13,212	18,017	11,035	61,792	141,239	70,427		2,133	205			318,060	196,211
Black cottonwood										212		212	
Total	155,369	1,476,296	125,931	624,397	436,178	232,109		42,609	5,644	242	1,648	3,100,423	412,742
Zone 2													
Western white pine	56,479	413	15,869	28,383	32,970	25,852	256	13,322	10,141		1,922	185,607	15,039
Ponderosa pine-pure		1,452,471	845	178,931	12,190	1,119						1,645,556	
Ponderosa pine-mixed	466	466,477	12,816	207,427	40,119	199		20,811	3,105		31	751,451	6,852
Larch-Douglas fir	11,747	19,056	441,525	326,446	72,446	8,192	122	87,260	22,537		12,391	1,001,722	2,626
Hemlock-white fir	527	9,805	8,359	74,139	586,019	2,549		46,675	13,087		1,644	742,804	4,772
Douglas fir	3,700	40,131	21,911	468,042	61,737	7,318		35,051	14,190[3]		4,968	657,048	10,646
Engelmann spruce	1,510	733	20,052	38,207	20,592	2,192		464,581	19,927[3]		65,184	632,978	3,563
Lodgepole pine	41	344	478	2,986	251			434	7,392		30	11,956	
Western red cedar[2]	4,071	154	3,064	6,661	9,015	46,473		5,919			257	75,614	19,851
Cedar-white fir[2]	12,427	10,607	3,281	36,718	87,192	86,042		9,323			2	245,592	68,652
Total	90,968	2,000,191	528,200	1,367,940	922,531	179,936	378	683,376	90,379		86,429	5,950,328	132,001
Zone 3													
Western white pine	109			109	109				218			545	
Ponderosa pine-pure		263,565		36,658	70				407			300,700	
Ponderosa pine-mixed		59,687	730	40,201	7,240			2,896	169			110,923	
Larch-Douglas fir	631	4,099	94,184	60,150	15,094	7		15,588	7,047		979	197,779	
Hemlock-white fir		804	19,208	54,614	261,595	7,720		25,056	6,343		3,533	378,773	1,644
Douglas fir	2,717	35,492	7,023	574,457	75,049	6,111		50,374	28,193[4]		19,368	798,784	7,185
Engelmann spruce	228	148	2,769	53,365	52,240			617,246	29,069[5]		42,692	797,757	
Lodgepole pine	1,140	1,222	6,321	13,794	611	768		31,721	132,923[6]		12,822	201,322	
Western red cedar[2]					1,982	25,969		642				28,593	
Cedar-white fir[2]		98		3,741	11,705	21,363		4,503			161	41,571	10,398
Total	4,825	365,115	130,235	836,989	425,695	61,938		748,026	204,369		79,555	2,856,747	19,227
GRAND TOTAL	251,162	3,841,602	784,366	2,829,326	1,784,404	473,983	378	1,474,011	300,392	242	167,632	11,907,498	563,970

1/ In Northern Rocky Mountain Region.
2/ Includes the volume in cedar and cedar-white fir merchantable pole stands.
3/ Includes 288 thousand board feet of whitebark pine.
4/ Includes 766 thousand board feet of whitebark pine.
5/ Includes 739 thousand board feet of whitebark pine.
6/ Includes 839 thousand board feet of whitebark pine.

Data as of January 1, 1938.

Table 6. CLASSIFICATION OF NONSAWLOG IMMATURE TIMBER TYPES ACCORDING TO DENSITY OF STOCKING

IDAHO COUNTY[1], IDAHO

Timber type[2]	Pole							
	Well stocked		Medium stocked		Poorly stocked		Total	
	Acres	%	Acres	%	Acres	%	Acres	%
Western white pine	1,584	58	940	35	194	7	2,718	100
Ponderosa pine-pure	13,638	41	14,774	44	4,805	15	33,217	100
Ponderosa pine-mixed	20,697	47	16,457	38	6,502	15	43,656	100
Larch-Douglas fir	36,220	91	2,826	7	601	2	39,647	100
Hemlock-white fir	9,308	84	1,676	15	153	1	11,137	100
Douglas fir	68,527	47	62,359	43	13,962	10	144,848	100
Engelmann spruce	7,214	56	4,528	35	1,206	9	12,948	100
Lodgepole pine	302,435	73	95,714	23	15,272	4	413,421	100
Western red cedar[3]								
Cedar-white fir	14,680	79	3,641	20	146	1	18,467	100
Total	474,303	66	202,915	28	42,841	6	720,059	100

Timber type[2]	Seedling and Sapling							
	Well stocked		Medium stocked		Poorly stocked		Total	
	Acres	%	Acres	%	Acres	%	Acres	%
Western white pine	7,498	53	3,556	25	3,072	22	14,126	100
Ponderosa pine-pure	2,081	37	1,468	26	2,117	37	5,666	100
Ponderosa pine-mixed	11,194	45	9,423	37	4,411	18	25,028	100
Larch-Douglas fir	16,430	75	3,984	18	1,458	7	21,872	100
Hemlock-white fir	8,496	51	4,844	29	3,432	20	16,772	100
Douglas fir	36,829	47	26,585	34	14,843	19	78,257	100
Engelmann spruce	5,976	53	4,376	38	1,007	9	11,359	100
Lodgepole pine	165,159	65	67,167	26	21,809	9	254,135	100
Western red cedar[3]	2,049	100					2,049	100
Cedar-white fir	14,099	51	4,500	16	9,251	33	27,850	100
Total	269,811	59	125,903	28	61,400	13	457,114	100

Timber type[2]	Total, pole, seedling and sapling							
	Well stocked		Medium stocked		Poorly stocked		Total	
	Acres	%	Acres	%	Acres	%	Acres	%
Western white pine	9,082	54	4,496	27	3,266	19	16,844	100
Ponderosa pine-pure	15,719	40	16,242	42	6,922	18	38,883	100
Ponderosa pine-mixed	31,891	46	25,880	38	10,913	16	68,684	100
Larch-Douglas fir	52,650	86	6,810	11	2,059	3	61,519	100
Hemlock-white fir	17,804	64	6,520	23	3,585	13	27,909	100
Douglas fir	105,356	47	88,944	40	28,805	13	223,105	100
Engelmann spruce	13,190	54	8,904	37	2,213	9	24,307	100
Lodgepole pine	467,594	70	162,881	24	37,081	6	667,556	100
Western red cedar	2,049	100					2,049	100
Cedar-white fir	28,779	62	8,141	18	9,397	20	46,317	100
Total	744,114	63	328,818	28	104,241	9	1,177,173	100

1/ In Northern Rocky Mountain Region. Data as of January 1, 1938
2/ The cottonwood type is not classified as to stocking.
3/ Small poles (6 to 12 or 14 inches) included with seedling and sapling.

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Table 7. CLASSIFICATION OF STOCKED TIMBERLANDS ACCORDING TO TYPE AND SITE QUALITY

IDAHO COUNTY[1/], IDAHO

Area in acres

Timber type[2/]	Site number						Total area	Average site
	I	II	III	IV	V	VI		
Western white pine	822	27,177	19,425	3,533			50,957	II & III
Ponderosa pine-pure		2,951	112,949	208,664	9,701		334,265	III & IV
Ponderosa pine-mixed		2,725	122,410	110,110	1,028		236,273	III & IV
Larch-Douglas fir	423	28,305	119,623	28,556	982		177,889	III
Hemlock-white fir		7,342	77,037	68,488	130		152,997	III & IV
Douglas fir		907	66,504	255,806	106,780	1,527	431,524	IV
Engelmann spruce	705	31,457	76,656	42,050	1,661		152,529	III
Lodgepole pine	9,447	179,343	398,604	112,201	6,234		705,829	III
Western red cedar		7,456	6,307				13,763	II & III
Cedar-white fir	111	39,330	58,874	4,877	70		103,262	II & III
Total	11,508	326,993	1,058,389	834,285	126,586	1,527	2,359,288	

1/ In Northern Rocky Mountain Region.
2/ The cottonwood type is not classified as to site.

Data as of January 1, 1938

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Table 8. CLASSIFICATION OF STOCKED TIMBERLANDS ACCORDING TO TYPE AND AGE CLASS
ZONES ONE AND TWO
IDAHO COUNTY[1/], IDAHO

Area in acres

Timber type[2/]	Age class - years						Total
	0-40	41-80	81-120	121-160	161-200	200+	
Western white pine	13,105	1,581	9,585	13,754	6,123	4,542	48,690
Ponderosa pine-pure	12,354	23,939	3,140	42,107	66,581	141,486	289,607
Ponderosa pine-mixed	39,483	22,462	12,612	65,380	33,728	39,053	212,718
Larch-Douglas fir	21,119	22,120	2,939	40,076	25,524	26,940	138,718
Hemlock-white fir	5,378	2,955	7,094	22,920	18,441	41,470	98,258
Douglas fir	26,869	51,330	27,616	52,185	12,161	12,275	182,436
Engelmann spruce	3,752		1,154	6,076	5,139	33,658	49,779
Lodgepole pine	42,599	62,989	13,737	10,627	1,061	172	131,185
Western red cedar	254	1,020	649	183	782	8,418	11,306
Cedar-white fir	26,761	14,078	11,789	31,354	5,028	7,420	96,430
Total	191,674	202,474	90,315	284,662	174,568	315,434	1,259,127

1/ In Northern Rocky Mountain Region.
2/ The cottonwood type is not classified as to age.

Data as of January 1, 1938

RE- NRM
Forest Survey

Table 9. AVERAGE ANNUAL CUTTING DEPLETION FROM THE GREEN TIMBER RESOURCES BY TREE SIZE, SPECIES AND PRODUCTS

IDAHO COUNTY[1], IDAHO

Product	White pine	Ponderosa pine	Larch	Douglas fir	White fir	Cedar	Hemlock	Engelmann spruce	Lodgepole pine	Total
From trees of sawtimber size thousand board feet - log scale (Scribner)										
Sawlogs[2]	58	1,075	70	371	105	1	1	52	11	1,744
Fuelwood[3]		2,840	162	486	405					3,893
Fence Posts[3]						165				165
Shingles[4]						4				4
Mine Timbers[5]		3		14			5			22
Total	58	3,918	232	871	510	170	6	52	11	5,828
From trees of less than sawtimber size (cubic feet)										
Fuelwood[3]			6,966	20,898					149,640	177,504
Fence Posts[3]			171,148	87,815		3,956				262,919
Poles[6]						181,086				181,086
Total			178,114	108,713		185,042			149,640	621,509

1/ In the Northern Rocky Mountain Region
2/ 1925-1936 inclusive.
3/ From a special survey in 1935.
4/ 1925-1934 inclusive.
5/ 1928-1932 inclusive.
6/ 1927-1929-1931-1933.

Glossary

NONFOREST LAND TYPES

Townsites - includes both incorporated and unincorporated urban settlements.

Cultivated - areas cleared and/or cultivated for agricultural use, including pasture.

Stump pasture - logged off or burned off lands, part of operating farm units, now chiefly devoted to grazing and from which stumps or snags have not been removed.

Barrens - areas too rocky, too scanty as to soil, or too exposed, to support a vegetative cover of either trees, shrubs, or herbs.

Grass - areas such as parks, mountain meadows, or treeless ridges, whose principal vegetation is grass and herbs.

Brush - areas whose principal vegetation is sagebrush, brush, or shrubs as a permanent type.

FOREST LAND TYPES

Timberland - forest areas capable of producing trees of commercial species and quality.

Producing timberland - timberland areas containing forest growth, or if not, which have been denuded since 1925.

Deforested timberland - nonrestocked old burns or cut-overs denuded prior to 1925.

Subalpine - stands above the altitude range of merchantability.

Rocky noncommercial - areas too steep, sterile, or rocky to produce merchantable timber.

Sawlog stands - timber stands containing 3 thousand board feet per acre for the ponderosa pine and lodgepole pine types or 4 thousand board feet for the other types, except cottonwood, in trees of sawlog size. The cottonwood type has no minimum limit. The minimum size classes for sawlog trees are: white pine, ponderosa pine, lodgepole pine - 12 inches, cedar - 24 inches, and other species - 14 inches (diameter breast high).

Merchantable pole stands - cedar or cedar-white fir stands containing 8 or more commercial cedar poles to the acre (12 to 24 inches diameter breast high).

Other pole stands - timber stands in which the majority of the dominant trees are between 6 inches and merchantable size.

Seedling or sapling stands - timber stands in which the majority of the dominant trees are less than 6 inches.

Recent burns and cut-overs - areas cut or burned since 1925 for which sufficient time has not elapsed to allow classification into one of the other timber types.

Reserved areas - includes publicly owned forest lands not available for conversion into timber products but reserved for parks, primitive areas, protection of municipal watersheds, etc.

Zones - Zone One includes areas loggable under present conditions.

Zone Two includes areas loggable with increased stumpage values.

Zone Three includes areas of no probable value for timber production.

Site class - the index of the productivity of an area for growing forests. There are 5 or 6 site classes with the best sites numbered one, the next best two, etc.

Stocking - in young timber stands stocking is the measure of the extent to which an area is covered with forest growth. The degrees of stocking are:

Less than 10 percent stocked	= unstocked
10 to 39 percent stocked	= poorly stocked
40 to 69 percent stocked	= medium stocked
70 to 100 percent stocked	= well stocked

0.5 D	Author	Forest Statistics
	Title	Idaho County, Idaho. (Northern Rocky Mt. Region)